

CITY OF JOLIET
RETIREE HEALTHCARE AND LIFE INSURANCE
BENEFIT PROGRAMS – ACTUARIAL VALUATION
FOR THE YEAR BEGINNING
JANUARY 1, 2014

May 8, 2015

Mr. Ken Mihelich Director of Administrative Services City of Joliet 150 W. Jefferson Street Joliet, IL 60432-4158

#### Dear Ken:

We have performed an actuarial valuation as of January 1, 2014, of the Retiree Healthcare and Life Insurance Benefit Programs sponsored by the City of Joliet. The actuarial valuation was performed in order to:

- Measure the actuarial liability as of January 1, 2014, and
- Develop retiree healthcare accounting expense and disclosure information for fiscal years 2014 and 2015 as defined under the GASB Statement Nos. 43 and 45.

In addition, we have performed ten-year actuarial projections of the GASB expense and pro forma funding levels.

The valuation was based on the following:

- Census data as of January 1, 2014, as provided by the City of Joliet, and claims, enrollment and premium data for calendar years 2012, 2013 and 2014, as provided by BlueCross BlueShield and Gallagher Benefit Services, Inc.;
- Plan provisions and funding policy in effect as of January 1, 2014, as provided by the City of Joliet, BlueCross BlueShield and Gallagher Benefit Services, Inc. as summarized in Section D:
- Our understanding of the substantive plan in effect as currently being administered. That is, retiree and dependent premiums have not increased since 1988, and will continue to remain level in the future; and
- Actuarial assumptions and methods shown in Section E as used for Police and Fire in the actuarial valuations performed for the City of Joliet and as used for the non-public-safety non-state employees in the actuarial valuation for the Illinois Municipal Retirement Fund.

The calculations reported herein have been made on a basis consistent with GASB Statements Nos. 43 (Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans) and 45 (Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pension). The undersigned are Members of the American Academy of Actuaries (M.A.A.A.) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Mr. Ken Mihelich City of Joliet May 8, 2015 Page 2

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose stated.

The signing actuaries are independent of the plan sponsor.

The valuation was based upon information furnished by the City of Joliet concerning benefits provided by the City of Joliet Retiree Healthcare and Life Insurance Benefit Programs, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the City of Joliet.

If you have any questions or comments, please call us at 312.456.9800.

Sincerely,

Alex Rivera, F.S.A., E.A. M.A.A.A., F.C.A.

alex Rivera

Senior Consultant

Paul Wood, A.S.A., M.A.A.A., F.C.A.

Consultant

AR: kb

Enclosures

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# **SECTION A**EXECUTIVE SUMMARY

#### **EXECUTIVE SUMMARY**

This report presents the results of our actuarial valuation as of January 1, 2014, for the Retiree Healthcare and Life Insurance Benefit Programs sponsored by the City of Joliet. The valuation was based on GASB statement Nos. 43 and 45. Our valuation was based on a discount rate assumption of 4.5 percent and an ultimate healthcare trend assumption of 4.5 percent, as approved by the City of Joliet. The discount rate reflects the employer's pay-as-you-go funding policy.

The key valuation results are summarized below:

Retiree Healthcare and Life Insurance Benefit Programs												
4.5% Discoun	t Rate and 4.5%	Ultimate Trend	l		Total							
	General Fund	Water/Sewer	Parking	Total	2012							
Actuarial Liability as of January 1, 2014	\$205,149,047	\$29,659,160	\$242,957	\$235,051,164	\$214,713,030							
Normal Cost for FY 2014	\$ 9,323,001	\$ 692,633	\$ 7,308	\$ 10,022,942	\$ 10,472,580							
GASB FY 2014 Expense (Annual OPEB Cost) (% of Payroll)	\$ 17,461,398 27.5%	\$ 1,808,647 24.6%	\$ 20,687 24.4%	\$ 19,290,732 27.2%	\$ 18,788,458 26.7%							
FY 2014 Benefit Payments (% of Payroll)	\$ 5,580,209 8.8%	\$ 1,180,261 16.1%	\$ 7,697 9.1%	\$ 6,768,167 9.5%	\$ 6,171,923 8.8%							
Actives Retirees	696 417	84 77	1 1	781 495	769 459							

The details of the valuation results by Fund are included in Section B of the report.

Based on our projected estimates, if the City of Joliet continues to fund retiree healthcare benefits on a pay-as-you-go basis, the Net OPEB Obligation is expected to grow to approximately \$225.1 million after nine years. The details of the projections are shown in Section B.

#### **EXECUTIVE SUMMARY (CONTINUED)**

#### Changes in the Plan Costs and Liabilities Since the Actuarial Valuation as of January 1, 2012

The actuarial accrued liability at January 1, 2012, was \$214.7 million, and the projected annual actuarial accrued liability at January 1, 2014, based on the valuation as of January 1, 2012, was \$243.9 million. The actual accrued liability at January 1, 2014, is \$235.1 million.

The Annual Required Contribution (ARC) for fiscal year 2012 was \$18.1 million, and the projected annual required contribution for fiscal year 2014 based on the valuation as of January 1, 2012, was \$20.0 million. The actual annual required contribution for fiscal year 2014 is \$18.4 million.

The key factors contributing to the decrease in actuarial liabilities from the expected amount of \$243.9 million to the actual amount of \$235.1 million include:

- During the two years, the plan experienced favorable healthcare trend experience which decreased the actuarial liability by \$32.7 million. Claims costs were expected to grow by approximately 18 percent over the past two years. Actual claims cost were flat.
- Demographic experience caused actuarial liabilities to increase by \$15.2 million.
- Changes in OPEB related assumptions and methods increased actuarial liabilities by \$8.7 million. The key assumption change was updating the healthcare trend rates used to project the member's average healthcare claim costs after retirement. The medical trend assumption used for the valuation as of January 1, 2012, was 9.0 percent in 2013, decreasing by 1.0 percent each year to an ultimate trend rate of 5.0 percent in 2017. This assumption was changed for the valuation at January 1, 2014, to 8.0 percent in 2015, decreasing by 0.5 percent each year to an ultimate trend rate of 4.5 percent in 2022. GRS also included an excess trend rate of 0.44 percent over the base healthcare trend rate beginning in 2019 applied only to pre-Medicare per capita claim cost to account for the Excise Tax under the Health Care Reform Act.

### **City of Joliet, Illinois** Retiree Healthcare and Life Insurance Benefit Programs GASB 45 Actuarial Valuation as of January 1, 2014 **Reconciliation of Change in Accrued Liability** (\$ In Thousands)

1. Accrued liability as of 1/1/2012	\$ 214,713	
2. Projected accrued liability as of 1/1/2014	\$ 243,876	
3. Changes in accrued liability due to:		Percent Increase
a. Claims Experience	(32,740)	-13.42%
b. Updated Trend Assumption	8,725	3.58%
c. Demographic and Other	15,190	6.23%
d. Total (a.+ b.+ $c$ .+ $d$ .)	\$ (8,825)	-3.61%
4. Accrued liability as of 1/1/2014 (2.+3.e.)	\$ 235,051	

## **SECTION B**

VALUATION RESULTS AT 4.5% DISCOUNT AND 4.5% ULTIMATE TREND

#### VALUATION RESULTS AT 4.5% DISCOUNT AND 4.5% ULTIMATE TREND

The following tables show the results of our valuation assuming a discount rate of 4.5 percent, salary increases comprised of a wage inflation component of 4.0 percent and a seniority and merit component that varies by age and/or service and an ultimate healthcare trend rate of 4.5 percent<sup>1</sup>. We believe these assumptions are consistent with the requirements of GASB Statement Nos. 43 and 45. According to paragraph 34(c) of GASB Statement No. 43 and paragraph 13(c) of GASB Statement No. 45, plans should use a discount rate consistent with the return on assets backing retiree healthcare benefits, which for pay-as-you-go plans will usually be the return earned by the employer's general assets.

The following tables are included in this section:

- GASB Valuation as of January 1, 2014, by Fund; and
- Ten-year GASB Projection for All Funds.

The ten-year GASB projections show an annual OPEB cost increasing from \$19.3 million in FY 2014 to \$30.0 million in FY 2023. When expressed as a percentage of payroll, OPEB expense is expected to increase from 27.2 percent to 29.7 percent of payroll. Expected retiree healthcare benefits are projected to increase from \$6.8 million in FY 2014 to about \$12.8 million in FY 2023. Expressed as a percentage of payroll, this is an increase from 9.5 percent in FY 2014 to 12.6 percent in FY 2023. The primary reason for the increase is due to the relationship between salary increases and healthcare trend increases. That is, salaries are expected to grow at 4.0 percent whereas healthcare benefits are expected to grow at 8.0 percent in 2015, 7.5 percent in 2016, etc., until the ultimate trend rate of 4.5 percent is reached in the year 2022.

The balance sheet liability or Net OPEB Obligation is expected to grow from \$94.2 million at FYE 2013 to \$225.1 million at FYE 2022. This increase is due to the fact that our calculations assume a pay-as-you-go funding policy; that is, employer contributions equal benefit payments for the current retiree group.

City of Joliet, Illinois OPEB Valuation

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<sup>&</sup>lt;sup>1</sup> Excess trend rate of 0.44% over the base healthcare trend rate beginning in 2019 applied only to pre-Medicare per capita claim cost to account for the Excise Tax under the Health Care Reform Act.

#### City of Joliet, Illinois Retiree Healthcare and Life Insurance Benefit Programs GASB 45 Actuarial Valuation as of January 1, 2014 Pay-as-you-go Funding Policy

Discount Rate4.50%Salary Scale  $^1$ 4.00%Ultimate Trend4.50%Wage Inflation4.00%

Amortization: 30-year open, level percentage of payroll

Retiree Healthcare Program		General Fund	V	Vater/Sewer Fund		Parking System		Total
I) Actuarial Liability								
A) Health Insurance								
i) Active Employees <sup>2</sup>	\$	106,970,358	\$	10,968,353	\$	197,088	\$	118,135,799
ii) Retired and Disabled Participants		94,020,649		18,051,671		42,205		112,114,525
iii) Total	\$	200,991,007	\$	29,020,024	\$	239,293	\$	230,250,324
B) Life Insurance								
i) Active Employees <sup>2</sup>	\$	843,434	\$	94,870	\$	3,664	\$	941,968
ii) Retired and Disabled Participants		3,314,606		544,266				3,858,872
iii) Total	\$	4,158,040	\$	639,136	\$	3,664	\$	4,800,840
C) Total Liabilities	\$	205,149,047	\$	29,659,160	\$	242,957	\$	235,051,164
II) Assets		-		-		-		-
III) Unfunded Actuarial Liability (UAL)	\$	205,149,047	\$	29,659,160	\$	242,957	\$	235,051,164
IV) Net OPEB Obligation (boy)	\$	87,548,037	\$	6,140,374	\$	506,090	\$	94,194,501
V) Normal Cost								
A) Health Insurance	\$	9,271,541	\$	687,750	\$	7,228	\$	9,966,519
B) Life Insurance		51,460		4,883	_	80		56,423
C) Total	\$	9,323,001	\$	692,633	\$	7,308	\$	10,022,942
VI) Annual Required Contribution (ARC)								
A) Normal Cost	\$	9,323,001	\$	692,633	\$	7,308	\$	10,022,942
B) Amortization of UAL		7,324,482	_	1,058,928	_	8,674	_	8,392,084
C) Total	\$	16,647,483	\$	1,751,561	\$	15,982	\$	18,415,026
VII) Annual OPEB Cost		4 - 4 - 400				47.004		40.447.024
i) ARC	\$	16,647,483	\$	1,751,561	\$	· · · · · · · · · · · · · · · · · · ·	\$	18,415,026
<ul><li>ii) Interest on Net OPEB Obligation</li><li>iii) Adjustment to ARC</li></ul>		3,939,662 (3,125,747)		276,317 (219,231)		22,774 (18,069)		4,238,753 (3,363,047)
	Φ.		Φ.		Φ.		Φ.	
iv) Total v) Percentage of Payroll	\$	17,461,398 27.5%	\$	1,808,647 24.6%	\$	20,687 24.4%	\$	19,290,732 27.2%
v)1 electriage of 1 ayron		21.370		24.070		24.470		21.2/0
VIII) Expected Employer Contributions <sup>3</sup>								
i) Implicit Subsidy	\$	1,327,004	\$	338,372	\$	2,270	\$	1,667,646
ii) Explicit Subsidy		4,253,205		841,889		5,427		5,100,521
iii) Total	\$	5,580,209	\$	1,180,261	\$	7,697	\$	6,768,167
iv) Percentage of Payroll		8.8%		16.1%		9.1%		9.5%
IX) Payroll	\$	63,555,003	\$	7,338,587	\$	84,738	\$	70,978,328

<sup>&</sup>lt;sup>1</sup> Base increase plus age or service based component.

<sup>&</sup>lt;sup>2</sup> Active employees eligible for future retiree healthcare benefits

<sup>&</sup>lt;sup>3</sup> Expected employer contributions to finance current retiree healthcare claims assuming pay-as-you-go funding.

City of Joliet, Illinois Retiree Healthcare and Life Insurance Benefit Programs GASB 45 Actuarial Valuation as of January 1, 2014 Pay-as-you-go Funding Policy

Ten-year GASB Projection for All Funds

(\$ in Thousands)

Discount Rate	4.50%
Salary Scale <sup>1</sup>	4.00%
Ultimate Trend	4.50%
Wage Inflation	4.00%

Amortization: 30-year open, level percentage of payroll

	1/	01/2014	1/	01/2015	1/	<u>/01/2016</u>	1/	<u>/01/2017</u>	1/	<u>′01/2018</u>	1/	01/2019	1/	01/2020	1/	<u>/01/2021</u>	1/	01/2022	1/	<u>/01/2023</u>
Retiree Healthcare and Life Insurance Progr	rams	•																		
A) Actuarial Liability	\$	235,051	\$	249,184	\$	263,815	\$	278,960	\$	294,581	\$	310,697	\$	327,403	\$	344,773	\$	362,702	\$	381,199
B) Assets		-		-		-		-		-		-		-		-		-		-
C) Unfunded Actuarial Liability (UAL)		235,051		249,184		263,815		278,960		294,581		310,697		327,403		344,773		362,702		381,199
D) Net OPEB Obligation (boy)		94,195		106,717		119,718		133,211		147,159		161,581		176,570		192,198		208,363		225,073
E) Annual Required Contribution (ARC) i) Normal Cost ii) Amortization of UAL iii) Total	\$ 	10,023 8,392 18,415	\$ 	10,424 8,897 19,321	\$	10,841 9,419 20,260	\$ 	11,274 9,960 21,234	_	11,725 10,517 22,242	\$ 	12,194 11,093 23,287	\$ 	12,682 11,689 24,371	\$ 	13,190 12,310 25,500	\$ 	13,717 12,950 26,667	\$	14,266 13,610 27,876
	Ф	10,413	Ф	19,321	Ф	20,200	Ф	21,234	Ф	22,242	Ф	23,267	Ф	24,371	φ	25,500	Ф	20,007	φ	27,870
F) Annual OPEB Cost i) ARC ii) Interest on Net OPEB Obligation iii) Adjustment to ARC	\$	18,415 4,239 (3,363)	\$	19,321 4,802 (3,810)	\$	20,260 5,387 (4,274)	\$	21,234 5,994 (4,756)	\$	22,242 6,622 (5,254)	\$	23,287 7,271 (5,769)	\$	24,371 7,946 (6,304)	\$	25,500 8,649 (6,862)	\$	26,667 9,376 (7,439)		27,876 10,128 (8,036)
iv) Total v) Percentage of Payroll	\$	19,291 27.2%	\$	20,313 27.5%	\$	21,373 27.8%	\$	22,473 28.1%	\$	23,611 28.4%	\$	24,790 28.7%	\$	26,013 29.0%	\$	27,286 29.2%	\$	28,604 29.4%	\$	29,968 29.7%
G) Expected Employer Contributions																				
<ul><li>i) Implicit Subsidy</li><li>ii) Explicit Subsidy</li></ul>	\$	1,668 5,100	\$	1,781 5,531	\$	1,895 5,985	\$	2,040 6,485	\$	2,185 7,004	\$	2,296 7,504	\$	2,380 8,005	\$	2,549 8,572	\$	2,740 9,155	\$	2,968 9,789
iii) Total iv) Percentage of Payroll	\$	6,768 9.5%	\$	7,312 9.9%	\$	7,880 10.3%	\$	8,525 10.7%	\$	9,189 11.1%	\$	9,800 11.3%	\$	10,385 11.6%	\$	11,121 11.9%	\$	11,895 12.2%	\$	12,757 12.6%
H) Payroll	\$	70,978	\$	73,817	\$	76,770	\$	79,841	\$	83,035	\$	86,356	\$	89,810	\$	93,403	\$	97,139	\$	101,024

<sup>&</sup>lt;sup>1</sup> Base increase plus age or service based component.

# **SECTION C**SENSITIVITY PROJECTIONS

#### SENSITIVITY PROJECTIONS

One of the key objectives of GASB 45 is to accrue an expense, for the value of future retiree healthcare benefits, during the working lifetime of an active employee. This objective requires a systematic means of spreading the present value of benefits over the person's working career. Actuarial cost methods are specifically designed to meet this objective.

It is important to note that GASB 45 does not require that a plan sponsor pre-fund retiree healthcare benefits during an employees working career. GASB 45 only requires accruing an expense for retiree healthcare benefits and reporting a balance sheet liability representing the cumulative difference between annual expense and employer contributions. However, sponsors that pre-fund retiree healthcare benefits will experience a significant reduction in the annual expense and balance sheet liability.

From 2014 to 2023, the annual expense is projected to increase from \$19.3 million to \$30.0 million under the pay-as-you-go funding policy and from \$15.2 million to \$19.6 million under the full funding policy. The annual employer's contribution is projected to increase from \$6.8 million to \$12.8 million under the pay-as-you-go policy and from \$13.0 million to \$16.9 million under the full funding policy.

Pre-funding benefits has several key advantages including the use of a higher discount which produces lower expense, and more stable costs. However, pre-funding would require additional near-term financing sources.

#### City of Joliet, Illinois Retiree Healthcare and Life Insurance Benefit Programs GASB 45 Actuarial Valuation as of January 1, 2014 Full Funding Policy

Discount Rate7.50%Salary Scale  $^1$ 4.00%Ultimate Trend4.50%Wage Inflation4.00%

Amortization: 30-year open, level percentage of payroll

Retiree Healthcare Program	General Fund	1	Vater/Sewer Fund		Parking System		Total
I) Actuarial Liability A) Health Insurance					•		
<ul> <li>i) Active Employees <sup>2</sup></li> <li>ii) Retired and Disabled Participants</li> </ul>	\$ 67,680,558 68,086,195	\$	6,846,586 13,192,679	\$	144,270 36,474	\$	74,671,414 81,315,348
iii) Total	\$ 135,766,753	\$	20,039,265	\$	180,744	\$	155,986,762
B) Life Insurance							
i) Active Employees <sup>2</sup>	\$ 441,246	\$	49,112	\$	2,321	\$	492,679
ii) Retired and Disabled Participants	 2,187,118		349,872				2,536,990
iii) Total	\$ 2,628,364	\$	398,984	\$	2,321	\$	3,029,669
C) Total Liabilities	\$ 138,395,117	\$	20,438,249	\$	183,065	\$	159,016,431
II) Assets	-		-		-		-
III) Unfunded Actuarial Liability (UAL)	\$ 138,395,117	\$	20,438,249	\$	183,065	\$	159,016,431
IV) Net OPEB Obligation (boy)	\$ 87,548,037	\$	6,140,374	\$	506,090	\$	94,194,501
V) Normal Cost							
A) Health Insurance	\$ 4,455,766	\$	325,737	\$	3,077	\$	4,784,580
B) Life Insurance	 20,522		1,994		27		22,543
C) Total	\$ 4,476,288	\$	327,731	\$	3,104	\$	4,807,123
VI) Annual Required Contribution (ARC)							
A) Normal Cost	\$ 4,476,288	\$	327,731	\$	3,104	\$	4,807,123
B) Amortization of UAL	 7,157,476		1,057,019	_	9,468		8,223,963
C) Total	\$ 11,633,764	\$	1,384,750	\$	12,572	\$	13,031,086
VII) Annual OPEB Cost							
i) ARC	\$ 11,633,764	\$	1,384,750	\$	12,572	\$	13,031,086
ii) Interest on Net OPEB Obligation	6,566,103		460,528		37,957		7,064,588
iii) Adjustment to ARC	 (4,527,783)		(317,566)		(26,174)		(4,871,523)
iv) Total v) Percentage of Payroll	\$ 13,672,084 21.5%	\$	1,527,712 20.8%	\$	24,355 28.7%	\$	15,224,151 21.4%
, ,							
VIII) Expected Employer Contributions <sup>3</sup>							
i) Implicit Subsidy	\$	\$		\$	2,270	\$	1,667,646
ii) Explicit Subsidy	4,253,205		841,889		5,427		5,100,521
iii) Additional Funding	 6,053,555	_	204,489	ф.	4,875	Φ.	6,262,919
iv) Total	\$ 11,633,764	\$	1,384,750	\$	12,572	\$	13,031,086
i) Percentage of Payroll	18.3%		18.9%		14.8%		18.4%
IX) Payroll	\$ 63,555,003	\$	7,338,587	\$	84,738	\$	70,978,328

<sup>&</sup>lt;sup>1</sup> Base increase plus age or service based component.

<sup>&</sup>lt;sup>2</sup> Active employees eligible for future retiree healthcare benefits.

<sup>&</sup>lt;sup>3</sup> Expected employer contributions to finance current retiree healthcare claims assuming pay-as-you-go funding.

City of Joliet, Illinois
Retiree Healthcare and Life Insurance Benefit Programs
GASB 45 Actuarial Valuation as of January 1, 2014
Full Funding Policy
Ten-year GASB Projection for All Funds
(\$ in Thousands)

Discount Rate	7.50%
Salary Scale <sup>1</sup>	4.00%
Ultimate Trend	4.50%
Wage Inflation	4.00%

Amortization: 30-year open, level percentage of payroll

	1/9	01/2014	1/	01/2015	1/	01/2016	1/	01/2017	1/	<u>/01/2018</u>	1/	<u>/01/2019</u>	1/	01/2020	1/	01/2021	1/	01/2022	1/	<u>/01/2023</u>
Retiree Healthcare and Life Insurance Prog	grams																			
A) Actuarial Liability	\$	159,016	\$	169,093	\$	179,568	\$	190,455	\$	201,713	\$	213,360	\$	225,488	\$	238,171	\$	251,304	\$	264,891
B) Assets		-		6,494		13,301		20,435		27,853		35,568		43,673		52,236		61,152		70,423
C) Unfunded Actuarial Liability (UAL)		159,016		162,599		166,267		170,019		173,861		177,792		181,816		185,935		190,151		194,468
D) Net OPEB Obligation (boy)		94,195		96,388		98,632		100,928		103,278		105,682		108,143		110,661		113,237		115,874
E) Annual Required Contribution (ARC) i) Normal Cost ii) Amortization of UAL	\$	4,807 8,224	\$	4,999 8,409	\$	5,199 8,599	\$	5,407 8,793	\$	5,624 8,992	\$	5,849 9,195	\$	6,083 9,403	\$	6,326 9,616	\$	6,579 9,834	\$	6,842 10,057
iii) Total	\$	13,031	\$	13,408	\$	13,798	\$	14,200	\$	14,616	\$	15,044	\$	15,486	\$	15,942	\$	16,413	\$	16,899
F) Annual OPEB Cost i) ARC ii) Interest on Net OPEB Obligation iii) Adjustment to ARC	\$	13,031 7,065 (4,872)	\$	13,408 7,229 (4,985)	\$	13,798 7,397 (5,101)	\$	14,200 7,570 (5,220)	\$	14,616 7,746 (5,341)	\$	15,044 7,926 (5,466)		15,486 8,111 (5,593)	\$	15,942 8,300 (5,723)	\$	16,413 8,493 (5,856)	\$	16,899 8,691 (5,993)
iv) Total v) Percentage of Payroll	\$	15,224 21.4%	\$	15,653 21.2%	\$	16,095 21.0%	\$	16,550 20.7%	\$	17,020 20.5%	\$	17,504 20.3%	\$	18,003 20.0%	\$	18,518 19.8%	\$	19,049 19.6%	\$	19,597 19.4%
G) Expected Employer Contributions																				
<ul><li>i) Implicit Subsidy</li><li>ii) Explicit Subsidy</li><li>iii) Additional Funding</li></ul>	\$	1,668 5,100 6,263	\$	1,781 5,531 6,096	\$	1,895 5,985 5,918	\$	2,040 6,485 5,675	\$	2,185 7,004 5,427	\$	2,296 7,504 5,244	\$	2,380 8,005 5,101	\$	2,549 8,572 4,821	\$	2,740 9,155 4,518	\$	2,968 9,789 4,142
iv) Total v) Percentage of Payroll	\$	13,031 18.4%	\$	13,408 18.2%	\$	13,798 18.0%	\$	14,200 17.8%	\$	14,616 17.6%	\$	15,044 17.4%	\$	15,486 17.2%	\$	15,942 17.1%	\$	16,413 16.9%	\$	16,899 16.7%
H) Payroll	\$	70,978	\$	73,817	\$	76,770	\$	79,841	\$	83,035	\$	86,356	\$	89,810	\$	93,403	\$	97,139	\$	101,024

<sup>&</sup>lt;sup>1</sup> Base increase plus age or service based component.

## **SECTION D**PLAN PROVISIONS

#### **PLAN PROVISIONS**

Following are the plan provisions reflected in our valuation of the City of Joliet retiree healthcare and life insurance benefits as of January 1, 2014.

#### **Medical Insurance Benefits:**

#### Benefits Provided for Plan Year beginning January 1, 2014

City of Joliet provides pre and post-Medicare health care benefits to retired employees and their dependents provided they satisfy one of the following requirements:

- 1) General, Water/Sewer and Parking Employees: Age 55 with 8 or more years of service and retired under the IMRF Pension Plan.
- 2) Police Officers: 20 years (or more) of Creditable Service and is no longer in service as a Police Officer.
- 3) Firefighters: Age 50 (or more) with 20 years (or more) of Creditable Service, is no longer in service as a Firefighter and retired under the City of Joliet Fire Pension Plan.
- 4) Medically disabled and totally and permanently unable to work.

The City of Joliet also provides healthcare benefits to the survivors of deceased employees and retired members. Coverage for spouses of deceased plan members will terminate if they remarry.

#### Coordination with Medicare

Benefits for members eligible for Medicare modified as follows:

The amount payable under the City's health plan will be reduced by the amount payable under Medicare for those expenses that are covered by both. Prescription drug benefits for post-Medicare retirees and dependents do not reflect a plan change or federal subsidy as available under the Medicare Prescription Drug, Improvement and Modernization Act, beginning in 2006. We understand the City of Joliet has applied for a Medicare Part D Subsidy.

*Funding Policy*. Retiree health care benefits are funded on a pay as you go basis. Benefits are self-insured up to certain stop loss limits.

#### Eligible Benefit Programs:

We have assumed retirees opting out of the retiree health program cannot reenter into the program. A brief description of the medical healthcare plan offered by the City of Joliet and the required retiree contributions are shown on the following pages:

<sup>&</sup>lt;sup>1</sup> Currently the City is only charging survivors and dependents of deceased employees and retired members the 1988 blended premium.

## PLAN PROVISIONS (CONTINUED)

## **BlueCross BlueShield**

Plan Feature	ВСВ	S Provid	ers	Non-BCBS Providers
Annual Deductible		) per pers ) per fami		\$ 500 per person \$ 1,000 per family
Out of Pocket Maximum		00 per per 00 per fan		\$ 3,000 per person \$ 9,000 per family
Covered Services	<u>C</u>	oinsuranc	e <u>e</u>	<u>Coinsurance</u>
-Physicians Visits	(Afte	80% er deducti	ble)	70% (After deductible)
-Emergency Care	(Afte	80% er deducti	ble)	80% (After deductible)
-Inpatient Services		100%		70% (After deductible)
-Outpatient Services		100%		70%
	Generic	Retail \$8	Mail Order \$14	
Prescription Drug Copays	Brand if no generic available	\$15	\$28	75% of eligible charge less the applicable co-pay
	Brand if generic available	\$35	\$68	
Maximum Lifetime Benefit		N/A		N/A

Medical benefits are coordinated with Medicare.

#### PLAN PROVISIONS (CONTINUED)

#### **Retiree Cost Sharing Provisions**

Police and Fire retirees as well as IMRF retirees with 20 or more years of service receive single healthcare coverage at no charge to the member. IMRF retirees with less than 20 years of service pay a portion of the 1988 single premium rate according to the following schedule. Members electing dependent coverage must pay the 1988 rate for the additional coverage. Surviving spouses pay the 1988 single premium rate.

Years of Service	Retiree Share of 1988 Rate for	Single Coverage							
20 or more	0%								
15-19	25%								
12-14	35%								
8-11	50%								
1988 Blended Premium Rates									
	1988 Blended Premium	Kates							
Pre-Medicare Single		\$118.20							
		\$118.20							

#### 100% Healthcare and Vision Blended Premium rates as of January 1, 2014

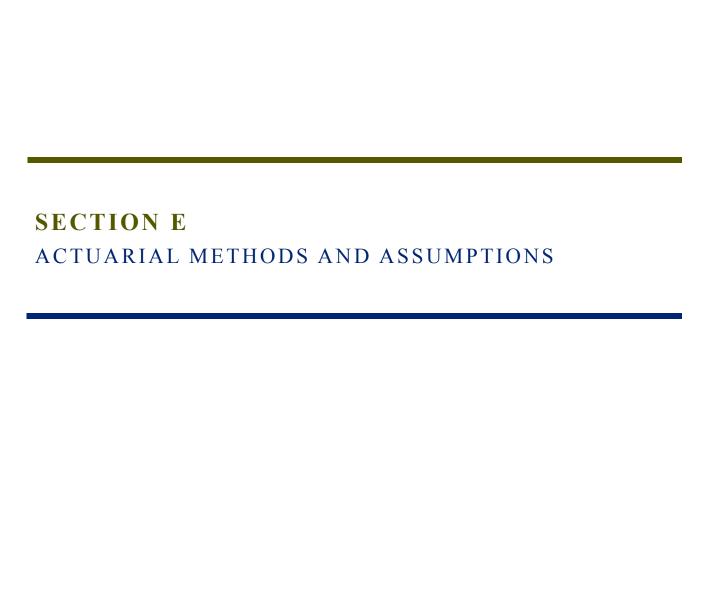
	Coverage Type								
	Single	2 Person	Family						
Medicare Eligible	\$ 395.83	\$ 791.67							
No Members Medicare Eligible	\$ 747.62	\$ 1,447.66	\$ 1,903.71						

#### **Life Insurance Benefits:**

- 1. Police Officers: Group term life insurance of \$12,500 at City's expense
- 2. Firefighters, Water/Sewer, Parking and General Employees: Group term life insurance of \$10,000 at City's expense
- 3. Mayor, Council, and Liquor Commissioners: Group term life insurance of \$25,000 at City's expense

On January 1, 2012, the City adjusted the life insurance plan for current employees raising their amounts for all the exempt groups to a flat \$50,000. At the same time they will no longer be offering retired individuals from these groups a lifetime benefit. Retirees prior to this date were grandfathered in. Grandfathered life insurance benefits for exempt members are as follows:

- 1. Exempt I: Group term life insurance of \$25,000 at City's expense
- 2. Exempt II: Group term life insurance of \$20,000 at City's expense
- 3. Exempt III: Group term life insurance of \$15,000 at City's expense
- 4. Exempt IV: Group term life insurance of \$10,000 at City's expense



#### ACTUARIAL METHODS AND ASSUMPTIONS

#### **Development of Per Capita Claim Costs**

Per capita claims costs were developed using paid claim experience adjusted to incurred claims, estimated administrative expense, and enrollment information for calendar years 2012 through 2014 for all members enrolled in the BlueCross BlueShield program. Retiree costs were developed using standard morbidity assumptions. Finally, average retiree costs were adjusted by trend to plan year 2014. Separate costs were developed for pre-Medicare and post-Medicare medical coverage and prescription drug coverage.

Prescription drug per capita claims costs and liabilities for post-Medicare retirees and dependents do not reflect future federal subsidies or plan changes due to the introduction of Medicare Part D.

#### Cost Method and Expense Calculations for Retiree Healthcare Benefits

The retiree healthcare valuation was based on the entry age normal cost method. Under this method, each participant's projected benefits are assumed to be funded by annual installments, equal to a level percentage of compensation, payable from date of participation to assumed date of retirement. The total normal cost is the sum of the current year's annual installment determined for all active participants. The actuarial accrued liability is the excess value of the present value of future benefits for all participants (both active and retired) over the present value of future normal costs.

Under GASB Statement Nos. 43 and 45, the entry age normal method is an acceptable cost method. The Annual Required Contribution (ARC) equals the normal cost plus the amortization of the unfunded actuarial accrued liability. The amortization cannot exceed 30 years. Our calculations assume a level-percentage-of-pay 30-year open amortization period. The Annual Expense or Annual OPEB Cost equals the ARC plus interest on the Net OPEB Obligation less an adjustment to ARC.

The Net OPEB Obligation or balance sheet liability is equal to the cumulative difference between the Annual OPEB Costs and employer contributions. The OPEB liability at transition date, January 1, 2006, was set to zero.

#### **Actuarial Assumptions**

The actuarial assumptions used in our valuation are outlined on the following pages.

<b>Measurement Date</b>	January 1, 2014
Discount Rate	4.50%
Price Inflation	3.00%
Wage Inflation	4.00%

#### **OPEB Assumptions**

Applied January 1	Healthcare Trend <sup>1</sup>
2015	8.00%
2016	7.50%
2017	7.00%
2018	6.50%
2019	6.00%
2020	5.50%
2021	5.00%
2022+	4.50%

<sup>&</sup>lt;sup>1</sup>Excess trend rate of 0.44% over the base healthcare trend rate beginning in 2019 applied only to pre-Medicare per capita claim cost to account for the Excise Tax under the Health Care Reform Act.

#### Per Capita Claim Costs for Plan Year 2014

<u>Age</u>	Medical/RX Costs			
	Male	Female		
40	\$ 4,360	\$ 6,428		
45	5,923	7,298		
50	8,014	8,546		
55	10,474	10,132		
60	13,158	11,903		
64	15,315	13,360		
65	5,268	4,566		
70	6,077	5,143		
75	6,747	5,635		
80	7,234	6,001		

.

Participation	and Election	Assumptions
i ai ucibaubii	and Lietuun	<b>435 minonons</b>

Percent of future retirees electing post-retirement healthcare coverage	100%
Percent married	80%
Of those married, percent married electing spouse healthcare coverage	80%
Percent of surviving spouses continuing coverage after death of retiree	60%

Females are assumed to be three years younger than their spouse

#### **Pension-Related Assumptions**

The pension-related assumptions disclosed in the Illinois Municipal Retirement Fund actuarial valuation report as of December 31, 2013, are assumed for general employees. GRS assumptions used for valuations as of January 1, 2014, of the Police and Fire Pension Funds were assumed for Police and Fire employees.

	Salary Increase		
Age	Service	Regular IMRF	
	0	7.0%	
	1	5.0%	
	2	3.5%	
	3	3.0%	
	4	2.0%	
	5	1.5%	
25	6 & Over	6.0%	
30		5.7%	
35		5.2%	
40		4.9%	
45		4.7%	
50		4.6%	
55		4.5%	
60		4.4%	

For IMRF Employees, a person with 6 or more years of service, the assumed pay increase during the coming year is found in the 6 or more years of service total column. For a person with less than 6 years of service, the % increase from the less than 6 years column that corresponds to the person's service is added to the increase from the 6 or more years of service total column that corresponds to the person's age to get the total assumed increase. For example, a 40-year-old with 8 years of service is assumed to get a 4.9% pay increase during the coming year. But a 40-year-old with 4 years of service is assumed to get a 6.9% increase (4.9% + 2.0%).

_	Salary Increase		
Years of			
Service	Police	Fire	
1	30.00%	30.00%	
2	27.50%	27.50%	
3	18.00%	20.00%	
4	8.00%	15.00%	
>=5	5.25%	5.25%	

For members with no salary provided in the data, we assumed their salary was equal to the average salary of the other members.

#### Demographic Assumptions

#### **Mortality Regular IMRF**

	Healthy	- Retiree	Disabled	- Retiree	Healthy	<b>Active</b>
Age	Male	Female	Male	Female	Male	Female
20	0.0282%	0.0127%	0.0482%	0.0199%	0.0165%	0.0055%
25	0.0370%	0.0144%	0.0839%	0.0351%	0.0216%	0.0062%
30	0.0482%	0.0199%	0.1103%	0.0480%	0.0281%	0.0086%
35	0.0839%	0.0351%	0.1393%	0.0749%	0.0489%	0.0152%
40	0.1103%	0.0480%	0.1784%	0.1094%	0.0643%	0.0209%
45	0.1393%	0.0749%	0.2963%	0.2129%	0.0813%	0.0326%
50	0.1784%	0.1094%	0.5864%	0.4207%	0.1041%	0.0476%
55	0.2963%	0.2129%	1.1528%	0.8078%	0.1728%	0.0926%
60	0.5864%	0.4207%	1.9696%	1.3933%	0.3421%	0.1829%
65	1.1528%	0.8078%	3.4246%	2.2020%	0.6725%	0.3512%
70	1.9696%	1.3933%	6.3176%	3.6677%	1.1489%	0.6058%
75	3.4246%	2.2020%	11.5488%	6.3171%	1.9977%	0.9574%
80	6.3176%	3.6677%	20.3136%	11.4082%	3.6853%	1.5946%

The RP-2000 Combined Healthy Mortality Table, sex distinct, adjusted for mortality improvements to 2020 using projection scale AA, with a multiplier of 1.20 for males and 0.92 for female is used for healthy retiree mortality. For disabled lives, the mortality rates are the rates applicable to healthy retiree lives set forward 10 years. The RP-2000 Combined Healthy Mortality Table, sex distinct, adjusted for mortality improvements to 2020 using projection scale AA, with a multiplier of 0.7 for males and 0.4 for females is used for healthy active mortality.

#### **Mortality Police and Fire**

	Healthy		Disa	bled
Age	Male	Female	Male	Female
20	0.0507%	0.0284%	0.0558%	0.0312%
25	0.0661%	0.0291%	0.0727%	0.0320%
30	0.0801%	0.0351%	0.0881%	0.0386%
35	0.0851%	0.0478%	0.0936%	0.0526%
40	0.1072%	0.0709%	0.1179%	0.0780%
45	0.1578%	0.0973%	0.1736%	0.1070%
50	0.2579%	0.1428%	0.2837%	0.1571%
55	0.4425%	0.2294%	0.4868%	0.2523%
60	0.7976%	0.4439%	0.8774%	0.4883%
65	1.4535%	0.8636%	1.5989%	0.9500%
70	2.3730%	1.3730%	2.6103%	1.5103%
75	3.7211%	2.2686%	4.0932%	2.4955%
80	6.2027%	3.9396%	6.8230%	4.3336%

The 1994 Group Annuity Mortality Table, sex-distinct, is used for healthy mortality. Disabled mortality is 110% of healthy mortality. 10% and 75% of deaths are assumed to occur in the line of duty for Fire and Police respectively.

**Sample Disability Rates** 

## % Separating Within Next Year

	Regular IMRF		Police	Fire
			Male &	Male &
Age	Male	Female	Female	Female
20	0.005%	0.003%	0.04%	0.09%
25	0.005%	0.003%	0.04%	0.10%
30	0.008%	0.005%	0.05%	0.10%
35	0.019%	0.008%	0.07%	0.12%
40	0.029%	0.014%	0.10%	0.15%
45	0.047%	0.021%	0.16%	0.21%
50	0.071%	0.035%	0.26%	0.78%
55	0.110%	0.053%	0.50%	1.36%
60	0.141%	0.094%	0.87%	2.30%
65	0.150%	0.110%	1.43%	3.35%

75% of disabilities for Police and Fire are assumed to occur in the line of duty.

#### **Sample Turnover Rates**

% Separating Within Next Year				
	Regular IMRF			
Age	Service	Male	Female	
	0	24.0%	28.5%	
	1	18.0%	21.0%	
	2	13.0%	15.0%	
	3	10.5%	12.0%	
	4	8.5%	10.0%	
	5	7.2%	8.3%	
	6	6.0%	6.8%	
	7	5.5%	6.2%	
25	8 & Over	4.5%	6.8%	
30		4.1%	6.1%	
35		3.3%	4.9%	
40		2.7%	3.9%	
45		2.3%	3.2%	
50		2.0%	2.7%	

Sample Turnover Rates % Separating Within Next Year

Service	Police	Fire
0	4.0%	1.4%
5	2.4%	0.9%
10	0.9%	0.6%
15	0.9%	0.3%
20	0.9%	0.2%
25	0.6%	0.1%
30 and over	0.0%	0.0%

Rates of Retirement for Members Hired before January 1, 2011

Police					I	Tire	_
Age	Rate	Age	Rate	Age	Rate	Age	Rate
50	7.5 %	60	25.0 %	50	5.0 %	60	30.0 %
51	7.5	61	50.0	51	5.0	61	50.0
52	15.0	62	50.0	52	5.0	62	50.0
53	15.0	63	50.0	53	10.0	63	50.0
54	15.0	64	50.0	54	20.0	64	50.0
55	25.0	65	100.0	55	25.0	65	100.0
56	25.0	66	100.0	56	30.0	66	100.0
57	25.0	67	100.0	57	30.0	67	100.0
58	25.0	68	100.0	58	30.0	68	100.0
59	25.0	69	100.0	59	30.0	69	100.0

### **Normal Retirement Rates** % Separating Within Next **Regular IMRF**

#### Hired Before 1/1/2011

		010 1/1/2011		
Age	Male	Female		
55	33.0%	27.0%		
56	25.0%	22.0%		
57	25.0%	22.0%		
58	25.0%	22.0%		
59	25.0%	22.0%		
60	12.0%	10.0%		
61	12.0%	10.0%		
62	22.0%	18.0%		
63	20.0%	18.0%		
64	20.0%	18.0%		
65	25.0%	23.0%		
66	30.0%	23.0%		
67	25.0%	23.0%		
68	20.0%	18.0%		
69	20.0%	18.0%		
70	20.0%	18.0%		
71 - 79	20.0%	18.0%		
80 & Over	100.0%	100.0%		

## **Normal Retirement Rates**

#### % Separating Within Next Year (Age-Based) IMRF - Hired On/After January 1, 2011 Service between

			~~				
	Service less	less than 30 years 30 and 35 years				Service 35 years or more	
Age	Male	Female	Male	Female	Age	Male	Female
67	30.0%	25.0%	50%	50%	62	75%	75%
68	30.0%	25.0%	50%	50%	63	75%	75%
69	25.0%	20.0%	50%	50%	64	75%	75%
70	20.0%	18.0%	50%	50%	65	75%	75%
71	20.0%	18.0%	50%	50%	66	75%	75%
72	20.0%	18.0%	50%	50%	67	75%	75%
73	18.0%	18.0%	50%	50%	68	75%	75%
74	18.0%	18.0%	50%	50%	69	75%	75%
75	18.0%	18.0%	50%	50%	70	75%	75%
76	18.0%	18.0%	50%	50%	71	75%	75%
77	18.0%	18.0%	50%	50%	72	75%	75%
78	18.0%	18.0%	50%	50%	73	75%	75%
79	18.0%	18.0%	50%	50%	74 - 79	75%	75%
80 & Over	100.0%	100.0%	100%	100%	90	100%	100%

#### Early Retirement Rates - IMRF Members Hired Before January 1, 2011 % Separating Within Next Year (Age-Based)

A 000	Regular Employees				
Age	Male	Female			
55	7.25%	5.75%			
56	7.25%	5.75%			
57	7.25%	5.75%			
58	7.25%	5.75%			
59	7.25%	5.75%			

#### Early Retirement Rates - IMRF Members Hired on or After January 1, 2011 % Separating Within Next Year (Age-Based)

A go	Regular Employees				
Age	Male	Female			
62	15.00%	13.00%			
63	15.00%	13.00%			
64	15.00%	13.00%			
65	15.00%	13.00%			
66	15.00%	13.00%			

# **SECTION F**PARTICIPANT DATA

#### **PARTICIPANT DATA**

City of Joliet, Illinois Retiree Healthcare and Life Insurance Benefit Programs Actuarial Valuation as of January 1, 2014 Population Breakout by Fund

**Counts by Fund** 

	0002200	,	
		Retirees and	
	Actives	Beneficiaries	Total
General Fund	696	417	1,113
Water/Sewer	84	77	161
Parking	<u>1</u>	<u>1</u>	<u>2</u>
	781	495	1,276

Retiree and Beneficiary Healthcare Coverage Type by Fund

	1 Person	2 Person	Family	Total
General Fund	177	207	33	417
Water/Sewer *	29	44	4	77
Parking	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>
	207	251	37	495

Note: Coverage Type by Fund for actives not provided because assumption is made on coverage type at the time of retirement.

City of Joliet, Illinois Retiree Healthcare and Life Insurance Benefit Programs Actuarial Valuation as of January 1, 2014 Age Service Distribution for Total Active Population

										Total
Attained _			Years of	Service	to Valuati	ion Date				Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 35	Total	Payroll
Under 20									-	\$ -
20-24									-	-
25-29	20	11							31	2,219,344
30-34	21	89	14						124	10,486,411
35-39	17	62	54	11					144	13,031,992
40-44	8	36	58	51	10				163	15,628,442
45-49	1	13	27	48	39	8			136	13,243,131
50-54	6	6	11	18	39	17	9		106	10,235,542
55-59	3	8	5	15	9	7	5	1	53	4,556,915
60-64	1	7	1	1	2	4	1		17	1,252,163
65-69			1						1	80,851
Over 70		2		2	2				6	243,537
Total	77	234	171	146	101	36	15	1	781	\$ 70,978,327

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 43.4 years
Service: 14.1 years
Annual Pay: \$90,881

## **SECTION G**GASB ACCOUNTING INFORMATION

This information is presented in draft form for review by the Fund's auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the Fund's financial statements.

## GASB ACCOUNTING INFORMATION

#### **OPEB Cost Summary:**

					Annual Required	
	<b>Annual OPEB</b>	<b>Employer</b>	% of AOC	<b>Net OPEB</b>	Contribution	% of ARC
Year Ended	Cost (AOC)	Contributions	Contributed	Obligation (eoy)	(ARC)	Contributed
December 31, 2015	TBD	TBD	TBD	TBD	\$19,321,000	TBD
December 31, 2014	\$19,290,732	TBD	TBD	TBD	18,415,026	TBD
December 31, 2013	18,168,101	\$6,502,194	35.8%	\$94,194,501	19,067,000	34.1%
December 31, 2012	18,791,182	6,171,923	32.8%	82,528,594	18,138,526	34.0%
December 31, 2011	19,668,000	6,571,409	33.4%	69,909,335	19,132,000	34.3%
December 31, 2010	18,592,855	6,710,568	36.1%	56,812,744	18,175,146	36.9%
December 31, 2009	16,809,001	6,147,332	36.6%	44,930,457	16,482,001	37.3%
December 31, 2008	15,842,526	5,160,371	32.6%	34,268,788	15,623,247	33.0%

#### **Schedule of Funding Progress:**

Actuarial Valuation Date	GASB Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Payroll [(b – a)/c]
January 1, 2014	\$0	\$235,051,164	\$235,051,164	0.0 %	\$70,978,328	331.2 %
January 1, 2012	0	214,713,030	214,713,030	0.0	70,369,756	305.1
January 1, 2010	0	205,086,432	205,086,432	0.0	71,889,093	285.3
January 1, 2009	0	180,752,000	180,752,000	0.0	71,298,274	253.5
January 1, 2008	0	167,485,137	167,485,137	0.0	68,556,033	244.3
January 1, 2007	0	201,403,182	201,403,182	0.0	61,364,217	328.2

## GASB No. 45 SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

The GASB 45 financial disclosure information for the fiscal years ending 2014 and 2013 were based on the following assumptions and methods.

Valuation Date	January 1, 2014
Actuarial Cost Method	Entry Age Normal
Actuarial Value of Assets	No Assets (Pay-as-you-go)
Amortization Method	Level Percent Open
Remaining Amortization Period	30 Years
Actuarial Assumptions:	
Investment Rate of Return	4.5% per year
Wage Inflation	4.0% per year
Healthcare Trend	8.0% per year graded down to 4.5% per year ultimate trend in 0.5% increments

<sup>&</sup>lt;sup>1</sup>Excess trend rate of 0.44% over the base healthcare trend rate beginning in 2019 applied only to pre-Medicare per capita claim cost to account for the Excise Tax under the Health Care Reform Act.